

CLAIMS

1. A multilayer product which comprises a first element consisting of a layer of spongy, semi-rigid polymer (A), impregnated on one or both sides with polyurethane resin (B), inserted between two layers of glass fibre and/or natural fibre (C), coupled in continuous with the central layer (B) (A) (B), said first element being characterized in that it is coupled with at least a second element comprising a layer of spongy, semi-rigid polymer (A), impregnated on one or both sides with polyurethane resin (B), said second element being in turn coupled with a further layer of glass fibre and/or natural fibre (C).
- 15 2. The multilayer product according to claim 1, characterized in that it has a (B) (A) (B) (C) (B) (A) (B) structure, wherein A, B and C have the meanings defined above and wherein other elements consisting of the layers (A), (B) and (C), can be added to the outer sides of this structure, with the alternation specified above, and/or with different alternations.
- 20 3. The multilayer product according to claim 1, characterized in that the spongy, semi-rigid polymer is selected from polyurethane, polystyrene and polyester.

4. The multilayer product according to claim 1, characterized in that the spongy, semi-rigid polymer is polyurethane.
5. The multilayer product according to claim 1, characterized in that the spongy, semi-rigid polymer is a polyurethane having a density ranging from 20 to 40 kg/m³.
6. The multilayer product according to claim 1, characterized in that the spongy, semi-rigid polymer which forms layer (A) is the same polymer in all the (A) layers.
7. The multilayer product according to claim 1, characterized in that the spongy, semi-rigid polymer which forms layer (A) is a polymer having different densities in the various (A) layers.
8. The multilayer product according to claim 1, characterized in that the glass fibre can be substituted by jute, sisal, coir or other equivalent natural materials.
- 20 9. The multilayer product according to claim 1, characterized in that it comprises the coupling on both the outer sides of the coupled elements, of layers of light fabrics and/or covering vlies (D), obtaining a product with the structure (D) (C) (B) (A) (B) (C) (B) (A) (B) (C) (D).

10. The multilayer product according to claim 1, characterized in that it comprises the application on both external sides of the sandwich, i.e. of the elements already coupled, or on only one side, of lining fabric, layers of anti-vibration material, etc.
11. The multilayer product according to claim 1, characterized in that the thickness of layer (A) varies from 4 to 18 mm.
- 10 12. The multilayer product according to claim 1, characterized in that the thickness of layer (A) varies from 5 to 7 mm.
13. The multilayer product according to claim 1, characterized in that the thickness of layer (A) is equal to 6 mm.
- 15 14. The multilayer product according to claim 1, characterized in that the layers (A) of spongy, semi-rigid polymer have the same thickness.
- 15 16. The multilayer product according to claim 1, characterized in that the layers (A) of spongy, semi-rigid polymer have different thicknesses.
- 20 17. Use of the multilayer product according to any of the previous claims, for the production of light, self-supporting, acoustic-insulated articles.
- 25 18. Use of the multilayer product according to any of

the previous claims, for the production of lining and fitting elements for car interiors.

18. Light, self-supporting, acoustic-insulated articles obtained by the hot moulding of the multilayer product according to any of the claims from 1 to 15.
- 5 19. Articles according to claim 18, characterized in that they are lining and fitting elements of car interiors.
20. A process for the processing of the multilayer product according to any of the claims from 1 to 15, said process being characterized by the application of various pressure concentrations in different zones of the multilayer product, thus obtaining zones having different compression strength, flexibility and acoustic insulation properties.
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